

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A light source unit, comprising:
an arc tube having a light emitting section, electrodes and sealed sections provided on both sides of the light emitting section, discharging emission being performed between the electrodes;
an elliptic reflector having a reflecting surface of a substantially elliptical shape to emit a luminous flux radiated from the arc tube in a certain direction;
a collimator lens to make parallel convergent light from the elliptic reflector;
a lamp housing to set a direction of an optical axis of the elliptic reflector, the lamp housing including a lens positioning member in which the collimator lens is fixed, the collimator lens being positioned and fixed to the lamp housing by the lens positioning member in a state in which the optical axis of the elliptic reflector and an optical axis of the collimator lens are aligned.
2. (Previously Presented) The light source unit according to claim 1, the lens positioning member being formed integrally with the lamp housing.
3. (Previously Presented) The light source unit according to claim 1, the collimator lens being fixed to the lens positioning member by thermal caulking.
4. (Previously Presented) The light source unit according to claim 1, the collimator lens being fixed to the positioning member with an adhesive agent.
5. (Previously Presented) The light source unit according to claim 4, the collimator lens being formed with a flange on an outer periphery thereof.
6. (Previously Presented) The light source unit according to claim 4, an entire outer peripheral surface of the collimator lens being adhered and fixed to the lens positioning member.

7. (Previously Presented) The light source unit according to claim 5, an angle of an extremity of the flange formed around the outer periphery of the collimator lens being an acute angle between 30° and 90°.

8. (Currently Amended) A projector to form an optical image by modulating a luminous flux emitted from a light source according to image information and to project the enlarged image, the projector comprising:

comprising the projector light source according to Claim 1.

9. (Previously Presented) The projector according to claim 8, the lens positioning member being formed integrally with the lamp housing.

10. (Previously Presented) The projector according to claim 8, the collimator lens being fixed to the lens positioning member by thermal caulking.

11. (Previously Presented) The projector according to claim 8, the collimator lens being fixed to the positioning member with an adhesive agent.

12. (Previously Presented) The projector according to claim 11, the collimator lens being formed with a flange on an outer periphery thereof.

13. (Previously Presented) The projector unit according to claim 11, an entire peripheral surface of the collimator lens being adhered and fixed to the lens positioning member.

14. (Previously Presented) The projector according to claim 12, an angle of an extremity of the flange formed around the outer periphery of the collimator lens being an acute angle between 30° and 90°.

15. (Withdrawn) A method of manufacturing a light source unit that includes an arc tube having a light emitting section, electrodes and sealed sections provided on both sides of the light emitting section, discharging emission being performed between the electrodes ;

an elliptic reflector having a reflecting surface of a substantially elliptical shape to emit a luminous flux radiated from the arc tube in a certain direction; a collimator lens to make parallel convergent light from the oval reflector; a lamp housing to set the direction of an optical axis of the elliptic reflector, and a lens positioning member provided in the lamp housing for fixedly accommodating the collimator lens, the method comprising:

fixing the elliptic reflector positioned with respect to the arc tube to the arc tube so that most part of light radiated from the arc tube is emitted from the elliptic reflector as convergent light converging toward a second focal point of the elliptic reflector;

fixing the lamp housing fixed to the arc tube to the lamp housing;

fitting the collimator lens to the lens positioning member;

adjusting a position of the collimator lens with respect to the lens positioning member to achieve optimal distribution of an illumination intensity of the luminous flux, which is emitted from the arc tube, reflected by the elliptic reflector and parallelized by the collimator lens; and

fixing the collimator lens which is positioned with respect to the lens positioning member, to the lens positioning member.

16. (Withdrawn) The method of manufacturing a light source unit according to claim 15, further including:

forming the collimator lens with a flange on an outer periphery thereof;

the fitting the collimator lens into the lens positioning member including:

allowing a gripping device to grip the flange formed on the outer periphery of the collimator lens; mounting the collimator lens to the gripping device; and fitting the collimator lens to the lens positioning member in a state in which the collimator lens is mounted to the gripping device;

the adjusting a position of the collimator lens with respect to the lens positioning member including moving the gripping device; and

the fixing the collimator lens to the positioning member including: adhering the outer peripheral portion of the collimator lens which is not gripped by the gripping device to the lens positioning member with an adhesive agent; removing the gripping device from the collimator lens; adhering the outer peripheral portion of the collimator lens at positions between the outer peripheral portion of the collimator lens and the lens positioning member on which the adhesive agent is not applied and the lens positioning member with the adhesive agent; and adhering and fixing an entire surface of the outer peripheral portion of the collimator lens to the lens positioning member.

17. (Withdrawn) The method of manufacturing a light source unit according to claim 15, the adjusting a position of the collimator lens with respect to the lens positioning member being performed in a direction perpendicular to a direction of an optical axis of the collimator lens.

18. (Withdrawn) The method of manufacturing a light source unit according to claim 15, the adjusting a portion of the collimator lens with respect to the lens positioning member being performed in a direction perpendicular to a direction of the optical axis of the collimator lens and in the direction of the optical axis.

19. (Withdrawn) A projector to form an optical image by modulating a luminous flux emitted from a light source according to image information and projecting the enlarged image, comprising:

a light source unit manufactured by a method of manufacturing the light source unit according to claim 15.

20-22. (Canceled)

23. (Withdrawn) A projector to form an optical image by modulating a luminous flux emitted from a light source according to image information and projecting the enlarged image, comprising:

a light source unit manufactured by a method of manufacturing the light source unit according to claim 16.

24. (Withdrawn) A projector to form an optical image by modulating a luminous flux emitted from a light source according to image information and projecting the enlarged image, comprising:

a light source unit manufactured by a method of manufacturing the light source unit according to claim 17.

25. (Withdrawn) A projector to form an optical image by modulating a luminous flux emitted from a light source according to image information and projecting the enlarged image, comprising:

a light source unit manufactured by a method of manufacturing the light source unit according to claim 18.